

Abstract

The preparation apparatus 4 determines the target distribution of the amount of polishing on the basis of the film thickness of the wafer 2 measured by the measuring apparatus 3. The preparation apparatus 4 assumes a control program for the purpose of controlling the polishing apparatus 1, and predicts the distribution of the amount of polishing that is obtained after the wafer 2 is polished by the polishing apparatus 1 in accordance with the assumed control program. In this case, the amount of polishing in individual partial regions of the polished surface of the wafer 2 is predicted using an indicator that indicates the height distribution of the polishing surface of the polishing pad 14 (when no pressure is applied to this polishing pad) as one parameter. The preparation apparatus 4 judges the acceptability of the assumed control program by comparing the predicted distribution of the amount of polishing and the target distribution of the amount of polishing. The polishing apparatus 1 polishes the wafer 2 in accordance with a control program that has been judged to be acceptable. As a result, the desired film thickness distribution on the side of the polished surface of the object of polishing can be simulated with good precision.